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SEP 8 1918

# AUSTIN STANDARDS FOR RAILWAY BUILDINGS

Completed on Time

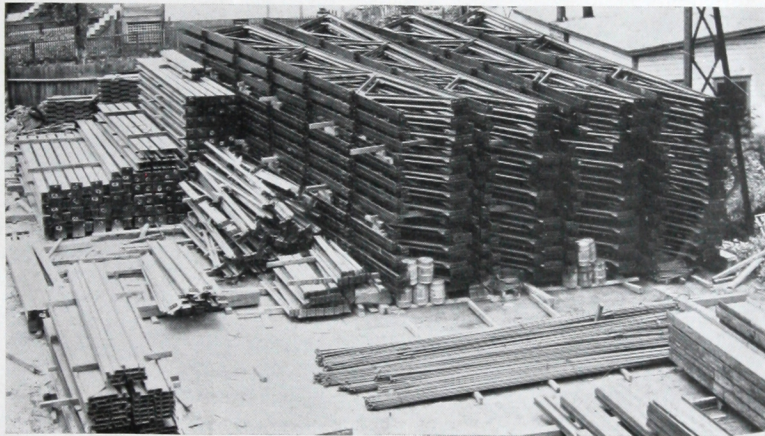


"Results, Not Excuses"









Fabricated Steel for more than 2 miles  
of building is the normal Austin Stock  
carried at strategic points in the east





## Typical Austin Progress

On Saturday, March 16, a contract was signed for a complete building on the property of The National Cash Register Co. of Dayton, Ohio. March 20 shows foundations well under way.



## March 30

The steel is up, one-third of the roof completed, brick work under way.



## April 23

Interior is practically completed, including heating, plumbing, wiring, toilets, and sprinkler system.

Painting is finished and some machinery already moved in.



## Finished in 30 working-days

A complete unit containing 58,000 square feet of floor space and with architectural features to conform to other buildings of the National Cash Register Company, was accepted at the end of thirty working days.



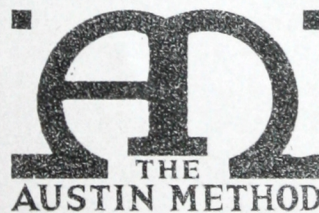
# Austin Standard Railway Building Units

An explanation with descriptions, cross-sections and illustrations, showing the application of Austin Standard Units to Typical Railroad Buildings

# Austin Building Service

A description of the engineering, purchasing and construction facilities for the complete erection of Railroad Structures in remarkably quick time

MAY, 1918



# The Austin Company

ENGINEERS AND BUILDERS

CLEVELAND      16112 Euclid Avenue      Eddy 4500

NEW YORK	217 Broadway	Barclay 8886	CHICAGO	437 Peoples Gas Bldg.	
PHILADELPHIA	1026 Bulletin Bldg.	Spruce 1291	DETROIT	1430 Penobscot Bldg.	Cherry 4466
WASHINGTON	1313 H Street N. W.	Franklin 6420	PITTSBURGH	493 Union Arcade	Grant 6071
INDIANAPOLIS 717 Merchants' Bank Bldg. Main 6428					

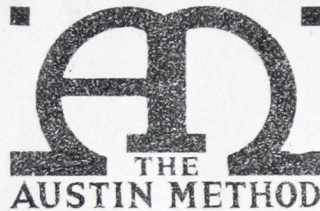
Export Representative: The American Steel Export Co.  
Woolworth Building, New York





Want Action ? - Wire AUSTIN

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## The Austin Trade Mark

THE frequent display of the Austin trade-mark in advertising and on buildings under construction has made it the subject of much comment—often jocular comment. One correspondent dubbed it “the bow-legged cryptogram.” In the interest of brevity the Austin men have come to know it as “the pretzel.” It is really a combination of the initials “A” and “M” an abbreviation of “Austin Method.” By whatever name it is called, it is recognized from coast to coast as standing for

Quality in Quick Time  
at Low Cost



## The Austin Method

Standardized plans, backed by stocks of materials and a speedy and experienced construction organization are meeting present day needs

THE cumulative evidence collected by the Austin Company during its forty years' experience in the building fields has resulted in a series of Austin Standard Factory Buildings which have been duplicated many times and are in service at various points from Maine to California. The promptness with which these standards have been erected has led to the slogan, "Want action?—wire Austin."

In the railway field, the same engineers who co-operated to establish standards for rails, bridges and equipment, are now adopting the idea of standardized buildings.

Working with the designing and engineering departments of many of the leading railroads, the Austin Company has developed a series of Railway Buildings including warehouses, freight stations and repair-shops, which apply Austin standard units of construction.

Remarkably quick construction of these standards is possible because most of the work is done before the order is received. Plans are standardized and ready. Specifications are prepared and basic costs figured. Structural steel is ready fabricated and other materials are in stock or easily obtained in the standard sizes used.

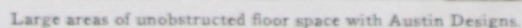
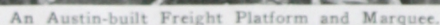
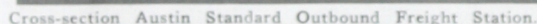
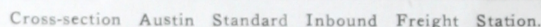
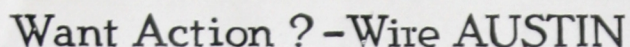
The plans illustrated in this booklet are basic standards which are capable of adaptation to individual requirements. For instance, any Austin Standard building is capable of expansion in width or length in standard multiples, and the height may be varied at will.

In fact the Austin organization is prepared to furnish any industrial type of structure built of steel, concrete, brick and wood, and to guarantee satisfactory completion on time.

Eight district organizations are ready at all times to render prompt and efficient designing, estimating and construction service. Many times the co-operation of Austin engineers with the designing department of the railway will result in slight changes which do not effect the building itself but which will allow the use of standard units which will reduce both time and cost.

The Austin Company is prepared to work on a lump sum or a percentage basis contract, and is ready with plenty of men, materials and equipment for high speed service.





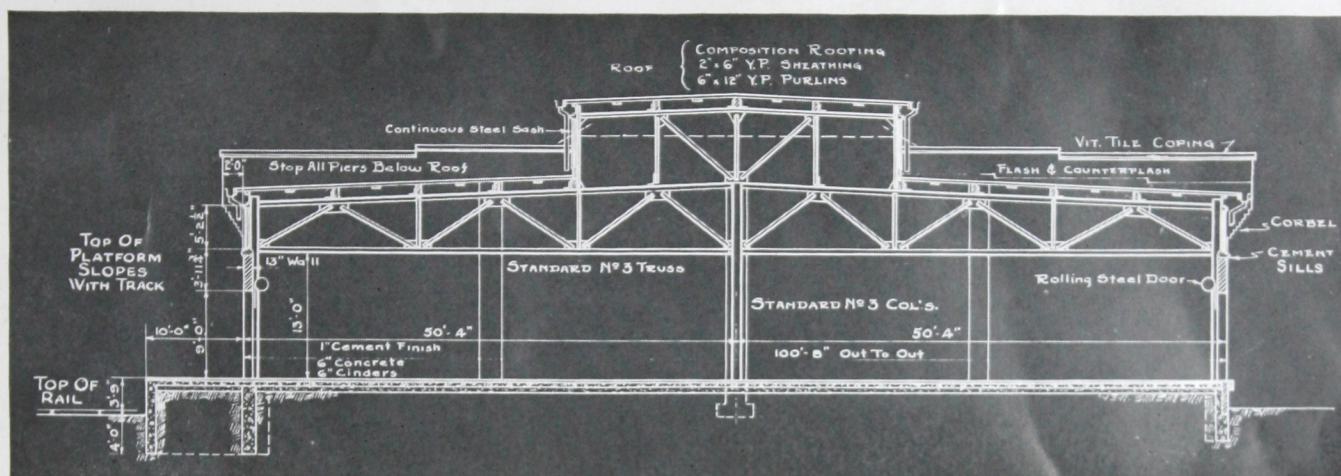
## 600 Lineal Feet in 60 Working Days

The roof trusses on these buildings are designed to carry a slate roof on wooden sheathing and purlins. These trusses will also carry tile or composition roofing. The steel is purchased under the American Society for Testing Materials specifications for structural steel for buildings, and the fabricating is done under specifications which will meet the most critical requirements.

Both of these building units are the Austin standard panel length of 20 feet, which has been found after most exhaustive investigation, to be the correct panel length for steam railroad freight houses. Enclosed platform construction with continuous sliding doors may be furnished if desired. Changes in the arrangement, size and character of openings, floor or roof do not conflict with the Austin method of high speed quality building.

The buildings as shown, or with modifications as to details, can be built in lengths up to 300 feet in 30 working days, or 600 feet in 60 working days. This high speed service is based on the following assumptions; that the site is clear and level, the soil bearing power is average, and railroad siding is available at the site for the delivery of material.





Cross-section of an Austin Freight Storage Warehouse built for the U. S. Government.

## Austin Standards for Freight Storage Warehouses

1000 Feet in 60 Working Days

This building is one hundred feet wide, has a single row of columns and can be furnished in any length in multiples of twenty feet. If a wider building is required this building may be extended in multiples of fifty feet. The height may be varied as required. The platform slopes toward the track and all dimensions have been standardized to meet railroad requirements.

It is well ventilated, and lighted, and has broad unobstructed areas of floor space, 2,000 square feet per column.

The structural capacity provides for a 1,000-pound mono-rail at any panel point. The bottom chords of the roof trusses are composed of two angle-irons set back to back to take bolts for shaft hangers at any panel point.

This Austin Standard has been built many times. Stocks for two miles of this structure are held in Austin warehouses subject to prior sale.

Lengths up to 500 feet can be built by the Austin Company in 30 working days.

The units illustrated on these pages are only a few of the adaptations of Austin Standards. Combinations can readily be worked out to give any width from 30 to 100 feet in multiples of 10 feet, and multiples of 20 to 50 feet in any width above 100 feet. Austin Standards cover the entire range of freight handling service from the 30 foot freight house to the heaviest type of multi-story fireproof warehouse.



200,000 square feet of No. 3, built for Dayton Metal Products Co. in record time.



Austin No. 3 Standard, built for the General Electric Co., Schenectady, N. Y.



Austin Standards include multiple-story fireproof warehouses.





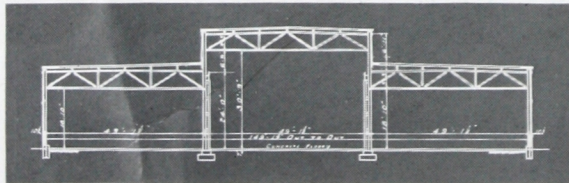
## Want Action ? - Wire AUSTIN



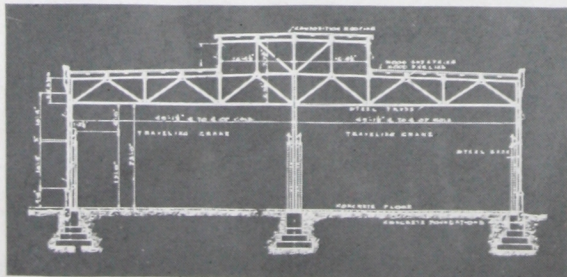
Interior of an Austin Standard, 150 x 500 Feet, Four Lakes Ordnance Co.



Architectural features may be varied to suit requirements.



18 to 20-foot headroom in side aisles and provision for crane service in center aisle.



No. 3 with high clearance, for traveling cranes, as built for the General Electric Company.

## Austin Standards for Freight Car Repair Shops

500 Feet in 60 Working Days

Slight modifications of existing Austin Standards will produce several types of freight car repair shops, identical with those now being used by a number of important trunk lines.

Like other Austin structural steel standards, the roof frame is designed for 35 pounds live load. Provision is made for a 1,000 pound shafting load at each panel point, and each panel point is punched to allow for struts which will sustain a load of 2,000 pounds. The roof may be of wood or gypsum tile sheathing. Provisions can be made in the columns for any bridge crane loading.

This building is of the Austin Standard 20 foot panel length, and may be built in any width in multiples of 50 feet. Side aisles are usually designed for 18 to 20 feet clearance.

The generous metal sash areas along the sides of the building and in the wide monitor insure maximum daylighting and excellent ventilation.

Any of these types lend themselves to high speed completion. Sixty thousand square feet of floor space can be built in 60 working days.





Austin No. 2 Standard, 90 x 860 Feet Built for New York Air Brake Company.

## Austin Standard Machine Shop

1,000 Feet in 60 Working Days

Normally this building is 90 feet wide, with three 30-foot aisles. I-beams are used, and may be cut to make the aisles any width less than 30 feet. The length may be any multiple of 20 feet. Daylight throughout the entire area is ample for machine-tool operation.

Auxiliary columns may be provided to carry a traveling crane in the center aisle; or a mono-rail can be carried by the trusses or beams. To form a level support for shafting, the beams are set horizontal. An extra set to support shaft hangers may be carried across the center aisle, as in the above illustration.

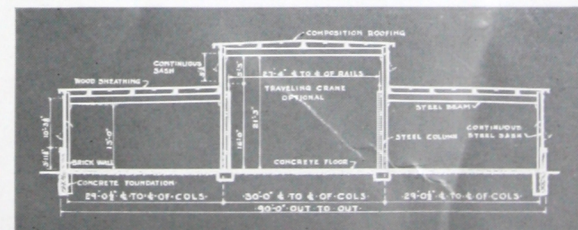
Austin No. 2 Standard may be extended side-wise to include any desired number of aisles; and it may be used as the upper story of other Austin Standards.

The list of owners of Austin No. 2 Standard includes American Brake Shoe & Foundry Co., Erie, Pa.; A. P. W. Paper Co., Albany, N. Y.; Covell Mfg. Co., Benton Harbor, Mich.; Dominion Steel Products Co., Brantford, Ont.; Eastern Brass & Ingot Co., Waterbury, Conn.; General Electric Co., Schenectady, N. Y.; Moore Steam Turbine Co., Wellsville, N. Y.; Morgan Engineering Co., Alliance, Ohio; New York Air Brake Co., Watertown, N. Y.; Torbenson Gear & Axle Co., Cleveland, Ohio; Turner-Vaughn-Taylor Co., Cuyahoga Falls, Ohio.

This type of building is given as a typical example. Other machine shop units are readily designed from the units illustrated on pages 7 and 10.



Austin No. 2 Standard, built for Dominion Steel Products Co., Brantford, Ont.

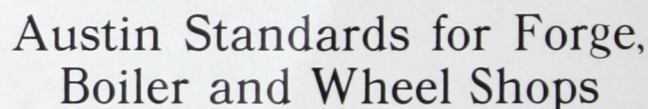
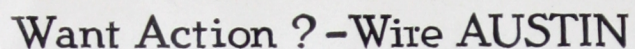


Section of No. 2 Standard.

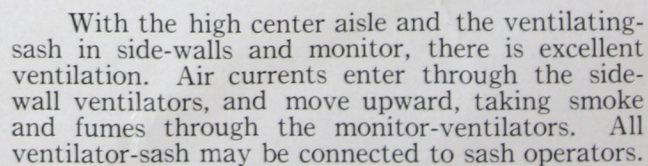
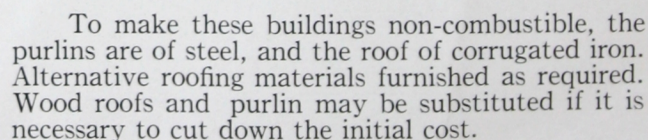


Interior of Austin No. 2 Standard, Dominion Steel Products Co.



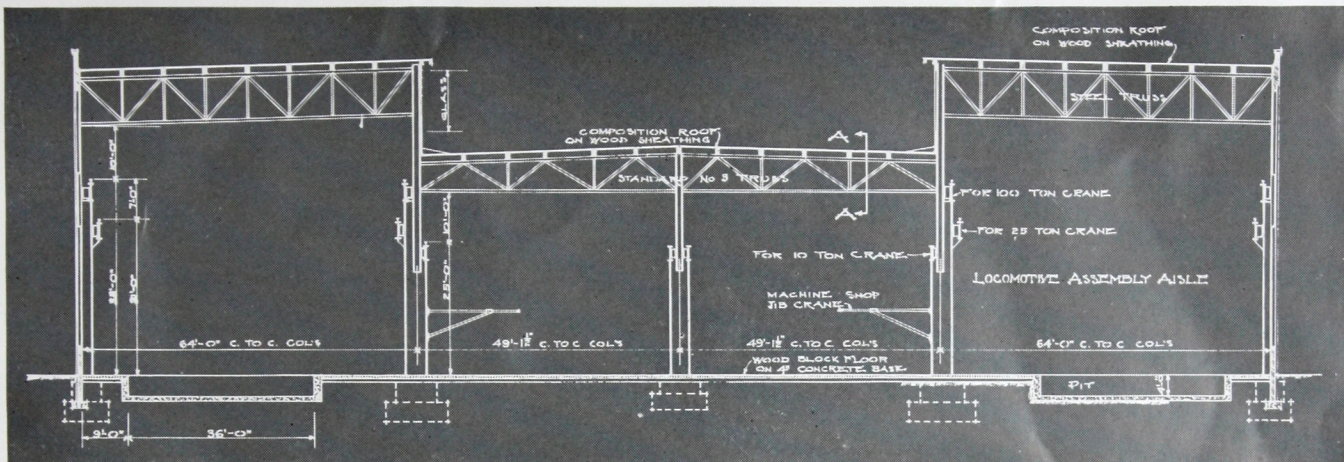


These three buildings are essentially similar except as to the width of the center aisle. In No. 5 the center aisle is approximately 42 feet wide, and the side aisles approximately 31 feet each, giving an over-all width of 104 feet 8 inches. In No. 6 the center aisle is approximately 47 feet wide; in No. 7, approximately 57 feet. Reference to the cross-sections on this page will make the differences clear. Austin Standard Nos. 5, 6 and 7 can be furnished without side-aisles, as illustrated above, or the side aisles may be increased in width to 50 feet, to give more machine space.



The center aisle may be provided with crane-rails for an overhead traveling crane. The crane capacity desired should be stated in any inquiries for these buildings.





Cross-section of Austin Standard Adapted to Locomotive-Erecting and Machine-Shop.

## Austin Standards for Locomotive Erecting and Machine Shops

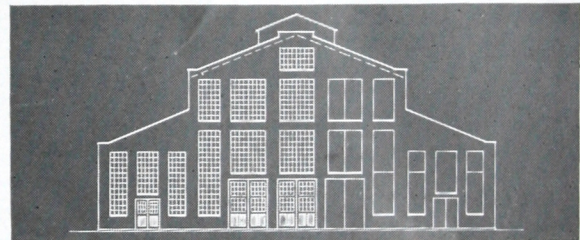
Completed in 90 Working Days

Highly specialized buildings, such as transverse locomotive erecting and machine shops are readily constructed with Austin Standard Units.

The above cross section for instance is a typical example. The erecting aisles of this building may be made 64, 70, 80, 90 or 100 feet wide. The machine shop section in the center aisle may be made 100, 150, 160, 170 or 200 feet wide, and equipped with bridge crane runways for any required loading. In any case, the columns and bracing will be designed and fabricated to provide for the required crane capacity. Five hundred feet of this building, or one similar, can be delivered complete and ready for occupancy in 90 working days. This high speed service will be undertaken on a penalty and bonus contract.

A 90-working-day delivery of the longitudinal locomotive-and-machine shop building, illustrated at the right above, is guaranteed by the Austin organization.

The center aisle of this building is slightly over 68 feet, the side aisles are 30 feet, but can be made 50 feet wide if desired. There are other Austin Standards that will meet special conditions which may surround your work. Austin Engineers will gladly assist in the application of these standards.



Austin Standards adapted to longitudinal locomotive and machine shop.

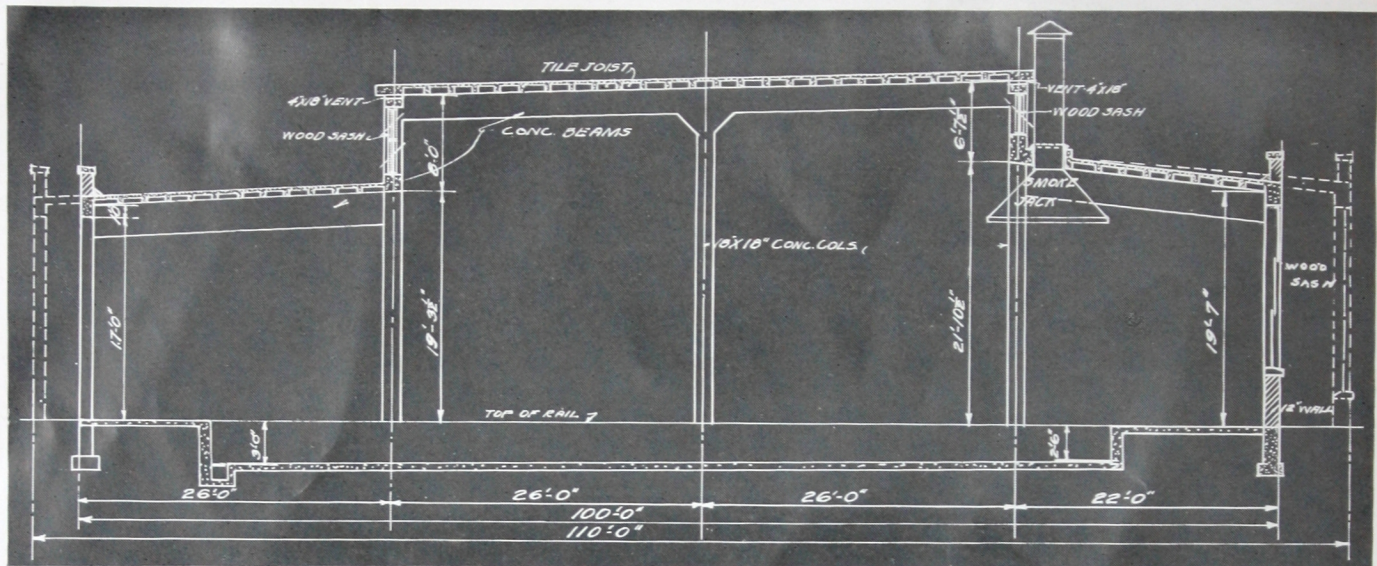


Architectural features may be varied to suit requirements.



Austin Standard R. R. Buildings are of permanent and substantial construction.





Cross-section Railway Round-house. It represents the best features of round-house construction on the principal trunk lines.

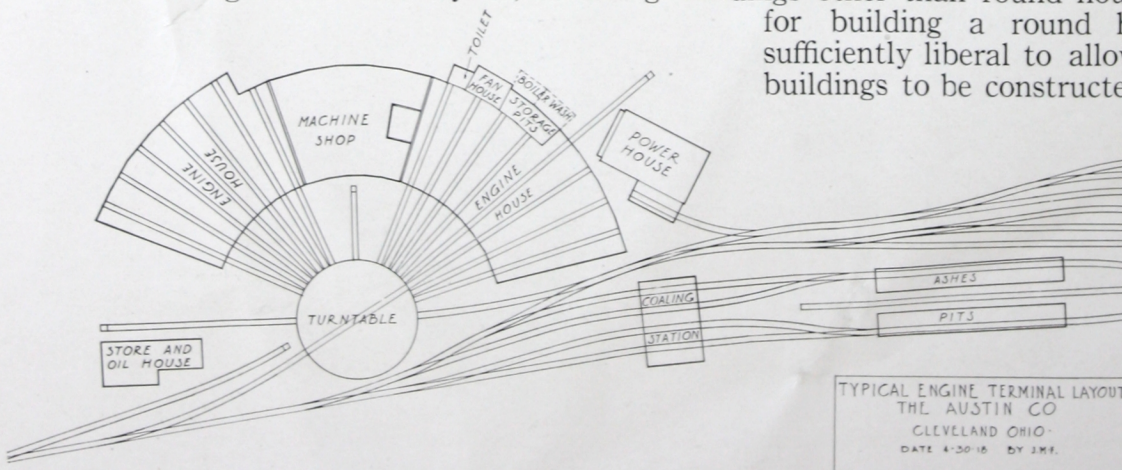
## Austin Standards for Round House Construction

IN 75 working days from date of order you may occupy a twenty stall round house of the above type of construction. Our engineers have investigated the modern types of round houses with a view to suggesting a typical section. The one shown represents the best ideas as gleaned from the latest types of round houses built by a number of the important trunk lines. It provides a permanent structure that obviates the usual ventilation and corrosion difficulties, and insures generous daylighting.

Other sections or materials may be specified to meet special conditions but a quicker and more positive delivery of the complete house will be obtained by using the materials and design shown in the above illustration. These include plain and reinforced concrete in the building frame, and a combination of Tee-beam and floor tile roof construction.

The Austin plan does not limit the length, width and spread of the stalls. All the essential materials in a structure of this kind are available in almost any locality. The cost is but little more than that for far less permanent structures.

In an engine terminal layout, including buildings other than round houses, the schedule for building a round house is made sufficiently liberal to allow other terminal buildings to be constructed simultaneously and completed within the period.



The Austin organization is prepared to construct complete terminal layouts in record time.





Austin No. 3 Standard with extended columns allowing crane operation on both side aisles—  
built for the General Electric Company of Schenectady, N. Y.



Interior construction of the same building—broad unobstructed areas with plenty of light  
are the rule with Austin Standards.



## Quick Construction of Special Buildings

When considering The Austin Company for building-work, ask any of the corporations mentioned below concerning the Austin record on their work. Most of these jobs were specially designed.



Morgan Engineering Company, Alliance, Ohio  
Note the 100-foot span for traveling-cranes.



Pittsburgh Transformer Company, Pittsburgh  
Completed in 78 working days.



American Engineering Company, Philadelphia  
Three buildings in 90 working days.



American Refractories Company  
Baltimore, Md.



General Electric Company, Lynn, Mass.  
Thirty-six days ahead of time.



Tidewater Oil Company, Bayonne, N. J.  
Thirty days ahead of time.



Ludlum Steel Company, Watervliet, N. Y.  
Designed by Theodore W. Price, New York. \$3,000 bonus  
for completion one day ahead of time.



American Refractories Company, Baltimore  
Buildings completed in 3½ months.  
On time to the day.



## How to Use Austin Service

THE Austin Company renders a comprehensive and efficient service in the design, construction and equipment of railway buildings. If you contemplate building, you owe yourself the satisfaction of investigating Austin facilities; for you cannot otherwise be sure of buying to the best advantage.

Investigate the record of Austin performance in high quality, quick time, low price. See some of the Austin buildings near you, and talk with the owners. For this purpose we have furnished names and addresses throughout the book.

Investigate the financial responsibility of the Austin Company. Look up its commercial rating.

Then, when you have assured yourself that The Austin Company is able and responsible, consider whether your needs will be served by any of the Austin Standard Railway-Buildings or their possible combinations. If so, you will save time and money.

If you decide that your work must be distinctly individual, ask for a conference with Austin Engineers.

If preliminary plans meet with your approval, tell The Austin Company to submit its suggested engineering-contract for preparing complete plans and specifications, or to submit its prices under any form of building-contract you may prefer.

Remember that The Austin Company will do all or any part of the work—engi-

neering, construction and equipment. It will

Develop your general plan and express it in terms of layout and buildings;  
Submit designs in competition with other engineers;  
Accept orders for designs to be submitted to other builders for competitive bids;  
Build from designs made by other engineers;  
Work in co-operation with the owner's engineer.

If your designs are to be made by your own engineer, instruct him for the sake of speed and economy to have them conform, so far as may be possible, to Austin Standards.

If your designs are already made, allow The Austin Company to check them over, without charge. Such checks have often suggested possibilities of simplicity and economy.

And finally:

In sending your inquiry, be as definite and explicit as possible. State the purpose of the building, the area required, the size and location of the site, the nature of the ground, the desired date of completion.

Write, wire or phone the nearest office.

# The Austin Company

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16112 Euclid Avenue

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CHICAGO

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Export Representative: The American Steel Export Co.  
Woolworth Building, New York





Austin Standards are readily adapted for crane operation. The above illustrates an Austin-Built machine shop—Morgan Engineering Company.







